

Balancing Tech Sustainability and Scalability: Lessons from *Learning Equality*

Maanas Sharma

Maanas Sharma is the founder & Editor-in-Chief of the Journal of Interdisciplinary Public Policy. He is a competitive policy debater, nationally ranked mathematician, and pianist. His work has been featured in Youth & Policy, The Blue Marble Review, and The MIT Science Policy Review. At his core, Maanas is passionate about transdisciplinary public policy and bringing historical and social-scientific understandings to data science and quantitative policy solutions.

I recently sat down with Dr. Jamie Alexandre, the co-founder and Executive Director of [Learning Equality](#), a 501(c)3 non-profit committed to enabling every person in the world to realize their right to a quality education, to discuss the organization's journey, mission, and how it is bridging the gap between governance, sustainability, and scalability.

Why don't we start by talking a little bit about Learning Equality and your products?

After working as an intern with Khan Academy, a colleague and I had the idea of bringing the Khan Academy experience offline using a low-cost Raspberry Pi computer to serve the half of the world without access to the Internet. After a prototype was developed, we open-sourced the technology, known as [KA Lite](#).

Shortly after it launched, it sparked an enthusiastic global response that led to a flood of requests for support, features, and partnerships. This sparked a decision to go "against the current" and create a nonprofit organization focused on supporting learning by means of offline-first educational technology. From the feedback we received, we realized the need to distribute materials beyond Khan Academy content (which is what KA Lite focused on), to provide better support to educators, and for an improved experience for discovering relevant learning resources.

So through our next technology, [Kolibri](#), we continued to bridge the online and offline worlds, enabling more equitable access to education technology in an inclusive way, but we also allowed different communities to contribute their own educational materials, organize them for their purposes, align them to local curricula, and adapt the platform to suit their unique needs.

Of course, Learning Equality prides itself on a strong sense of justice. What actions have you taken to promote equity in the products and their deployment?

Indeed, equity has been at the forefront of everything that we do from the beginning. The biggest piece of that is this focus on offline first. Often, a platform is designed first as an online tool, and then parts of it are taken offline — that's offline second. Our focus on what it means for a whole ecosystem to work completely offline and never need to be online is critical, because connectivity is one of the significant barriers to equitable access to education technology. Also, since the other considerable barrier is the cost of hardware, we are designed to work on older or legacy devices and a wide variety of operating systems. Being "device agnostic" is another portion of equity because that allows for existing infrastructure to be leveraged wherever possible.

Second, our push for curriculum alignment is rooted in equity as well. A lot of the content in our library is not going to be aligned to a country's specific standards. So, the more we can scaffold that process and reduce the time needed to find suitable content also serves equity, because those who have the least also have the least time and resources to do that themselves.

An additional path to equity is whom we choose to work with. By working with partners that focus on serving particular communities, we can better understand those communities' needs and design our platform to better address those. As an example, we work with UN Women to understand and support the needs of women and girls, and UNHCR to meet the needs of refugees and migrants. So, whom an organization is serving and how they could help us better support a marginalized group are key considerations when choosing whom to work with.

Learning Equality has also been notable in its decision to open-source both of your main technologies. What have been the benefits and drawbacks of that decision?

From the start, one of our core values was openness and wanting to share what we were creating as broadly as possible. We've continued down that road for a number of reasons.

One advantage is that you enable people to take the technology and make it their own, in a way that they wouldn't necessarily if you had it closed-sourced (even if it was made freely available). For example, a random guy in Russia came along and helped create a standalone app for KA Lite on Android, which was something we wouldn't have had time to get to for a long time. Still, for us, 90% of the development is internal, but engaging a broad community of developers is an exciting benefit.

Some downsides to open-sourcing are that it creates extra work in terms of documentation and coding standards. But those are all things that you want to have anyway, so it's just putting more pressure on you to create something better. It also takes away some leverage in the sustainability model. We're funded partly by philanthropy but also by earned revenue. So, even though the software itself is open and free, we have a model of value-added services that can support a large well-funded organization around things like training, customization, technical assistance, or hosting. But, we have less leverage in terms of some of those services with everything being completely open, because some other third party could out-compete us in price.

Again, that's a trade-off we're willing to make because of all the other benefits of being open and because we don't want to be a bottleneck — there's only so much work that we could take on, so we want to foster an ecosystem of others building sustainable models around the tools as well.

Likewise, why did you decide to be a non-profit rather than a for-profit company?

It's a similar kind of answer to that of open-sourcing — there are trade-offs.

The biggest is the types of funding sources that are going to be available. As a nonprofit, you're not going to get VC (Venture Capital) funding or anything where people expect a financial return on their investment, because that's not compatible with the model.

Conversely, many grants, philanthropy, and other funding sources are not going to be available to a for-profit model.

So, it's really dependent on the individual projects/model — which of those avenues is most likely to create something that supports the sustainability of the work? For us, because we're making public goods and open tools, it was a non-profit.

Finally, what role do you think technology will play in the fight for universal quality education (like UN's Sustainable Development Goal #4)?

One thing that's clear is that technology is not a silver bullet. It is only a tool that can be very powerful, if used effectively. Thus, the real change happens in mindsets, training, support, and experimentation, producing new learning experiences that can leverage technology better and that are centered around human experiences.

However, the focus for many years on the Millennium Development Goals was on school access and school enrollment. And so, those rates did go up dramatically. Because the focus was on access rather than on effective learning, and they didn't have enough capacity to hire

and train new teachers, the learning outcomes (literacy rates and numeracy rates) weren't going up at pace. Therefore, quality of education is where the biggest gap still exists, which is what this SDG aims to address.

Thus, the question becomes, "how can we ensure that students are learning effectively?" This is also a place where leveraging the technology to support teacher training can come into play. Even if they're not teaching with technology, technology can be used to help up-skill teachers to enable them to better teach students. And we've seen that happen across many contexts in our work at Learning Equality, in addition to our primary model, which involves learners themselves directly engaging with the technology.